

AMENDMENTS TO THE CLAIMS

The present application is a U.S. National Phase Application of PCT/GB2005/00363, filed in accordance with 35 U.S.C. 371. Article 19 amendments were filed in the referenced application and received by the International Bureau on November 21, 2005. The following amendment is provided to place the Article 19 amended claims in compliance with U.S. claim format.

1. (Original) A method of damaging target cells in a subject, the method comprising administering to the subject

(1) a nucleic acid encoding a compound capable of converting a substrate to acetaldehyde, wherein said compound is an enzymatically active portion of alcohol dehydrogenase; and

(2) a substrate which is converted to acetaldehyde by the portion capable of converting said substrate to acetaldehyde;

wherein said substrate is ethanol.

2. (Original) A method according to claim 1 further comprising administering a component that is capable of inhibiting aldehyde dehydrogenase.

3. (Original) A method according to claim 2 wherein said component that is capable of inhibiting aldehyde dehydrogenase is Disulfiram.

4. (Currently amended) A method according to any one of claims 1 to 3 wherein the nucleic acid is in the form of a viral vector.

5. (Original) A method according to claim 4 wherein the viral vector is a DNA based viral vector.

6. (Original) A method according to claim 5 wherein the DNA based viral vector is an adenovirus derived viral vector.

7. (Currently amended) A method according to any one of claims 1 to 6
1 to 3 wherein the nucleic acid comprises a polynucleotide comprising a target cell-specific promoter operably linked to a polynucleotide encoding said alcohol dehydrogenase.

8. (Currently amended) A method according to any preceding claim
claim 1 in which the portion of alcohol dehydrogenase converts the ethanol to acetaldehyde as a result of its enzymatic activity.

9. (Currently amended) A method according to any of claims 4 to 8
claim 4 wherein said vector comprises a target cell specific portion.

10. (Original) A method according to claim 9 in which the target cell specific portion comprises an antibody or part thereof.

11. (Currently amended) A method according to claim 9 ~~or claim 10~~ in which the target-cell specific portion is capable of selectively binding to a cell surface entity.

12. (Original) A method according to claim 11 in which the cell surface entity is a tumour-associated antigen.

13. (Currently amended) A method according to any one of claims 9 to 12
claim 9 in which the target cell specific portion comprises a liposome.

14. (Currently amended) A method according to any one of claims 1 to 13
claim 1 in which a further comprising administering radiation therapy is also administered to the subject.

15. (Currently amended) A composition comprising a compound as defined in any of claims 1 to 13 claim 1, wherein the portion of alcohol dehydrogenase in an enzymatically active portion of human alcohol dehydrogenase.

16. (Currently amended) A composition according to claim 16 claim 15 wherein said human alcohol dehydrogenase is alcohol dehydrogenase β2.

17. (Original) A composition according to claim 15 or claim 16 further comprising a substance which is capable of inhibiting aldehyde dehydrogenase.

18. (Original) A composition according to claim 17 wherein said substance which is capable of inhibiting aldehyde dehydrogenase is Disulfiram.

19. (Currently amended) A composition according to any one of claims 15 ~~to 18 or 16~~ further comprising a chemotherapeutic agent.

20. (Currently amended) A composition according to any one of claims ~~15 to 19-15 or 16~~ further comprising an immunosuppressive agent.

21. (Canceled)

22. (Currently amended) ~~Use of a composition according to any of claims 15 to 20 in the manufacture of a medicament A method for the treatment of cancer comprising administering to a subject in need thereof a composition of any one of claims 15 or 16 in an amount effective to treat said cancer.~~

23. (Currently amended) ~~Use of A method of treating cancer comprising administering ethanol or pyruvate to a subject in need thereof in the manufacture of a medicament for the treatment of cancer.~~

24. (Currently amended) A therapeutic system or kit comprising a compound or system as defined in ~~any of claims 1-13 claim 1~~, or a composition as defined in ~~any of claims 15 to 20 claim 15 or 16~~, and a second component which comprises ethanol, and optionally a third component that is capable of inhibiting aldehyde dehydrogenase.

25. (Original) A therapeutic system or kit according to claim 24 in which the aldehyde producing portion is a catalytically active portion of alcohol dehydrogenase, the second component is ethanol and the third component is Disulfiram.

26. (Canceled)

27. (Canceled)

28. (New) A composition according to claim 19 further comprising an immunosuppressive agent.

29. (New) A composition according to claim 17 further comprising a chemotherapeutic agent.

30. (New) A composition according to claim 18 further comprising a chemotherapeutic agent.

31. (New) A composition according to claim 17 further comprising an immunosuppressive agent.

32. (New) A composition according to claim 18 further comprising an immunosuppressive agent.

33. (New) A composition according to claim 19 further comprising an immunosuppressive agent.

34. (New) A method for the treatment of cancer comprising administering to a subject in need thereof a composition of claim 17 in an amount effective to treat said cancer.

35. (New) A method for the treatment of cancer comprising administering to a subject in need thereof a composition of claim 18 in an amount effective to treat said cancer.

36. (New) A method for the treatment of cancer comprising administering to a subject in need thereof a composition of claim 19 in an amount effective to treat said cancer.

37. (New) A method for the treatment of cancer comprising administering to a subject in need thereof a composition of claim 20 in an amount effective to treat said cancer.